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ABSTRACT

In response to concerns of unnecessary duplication in programs offered by Texas community/junior colleges and the Texas State Technical College (TSTC) system, TSTC conducted a two-phase study to examine curricula, enrollments, and outcomes for both systems. The first phase described differences in technical program curricula and graduate percent yield (GPY) at the systems, while the second phase focused specifically on differences in the physical, biological, and social science program clusters to test the validity of phase I findings. Data were obtained from published reports and official documents of the Texas Higher Education Coordinating Board for the 1990-91 school year and the 1990 federal fiscal year. Phase II findings included the following: (1) the significant difference in curricula found in phase I for TSTC and state community/junior colleges was supported in phase II, with TSTC curricula emphasizing physical science-based technologies (e.g., aerospace, electronics, and energy/environmental) and community colleges emphasizing social science-based technologies (e.g., marketing, office skills, and criminal justice); (2) community colleges had the highest GPY in biological science-based programs particularly the medical/health care technologies supporting the finding from phase I that coherent programs of study increase students' chances of graduating; (3) students attending TSTC were much more likely to complete a technical degree or certificate program than those at community colleges; and (4) the second phase also reemphasized the unique curricula design and instructional delivery system at TSTC, with students required to take more courses, complete more contact hours, and spend more time in labs at TSTC than at community colleges. The technical programs clustering methodology and data tables are appended. (TGI)

A COMPARATIVE ANALYSIS OF POSTSECONDARY TECHNICAL EDUCATION IN TEXAS

PHASE II

PHYSICAL SCIENCE, BIOLOGICAL SCIENCE AND SOCIAL SCIENCE CLUSTERS

PREPARED BY:

TEXAS STATE TECHNICAL COLLEGE SYSTEM

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OCCUPATIONAL AND INSTITUTIONAL RESEARCH
J. Gary Hendricks
Teresa S. Isbell

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A COMPARATIVE ANALYSIS OF POSTSECONDARY TECHNICAL EDUCATION IN TEXAS

PHASE II

INTRODUCTION

Texas State Technical College (TSTC) is undergoing reviews by the Texas Higher Education Coordinating Board and a subcommittee of the House Committee on Higher Education. These reviews were undertaken due to a concern that unnecessary duplication exists in programs offered by TSTC and the Texas community/junior colleges. Comparatively, TSTC has four campuses and three active extension centers with two additional centers scheduled for implementation in Fall 1992, while the community/junior colleges have 65 campuses and approximately 250 extension centers. Compared to the community/junior colleges, TSTC offers 5 percent of the total number of technical programs, enrolls 6 percent of the technical students, and accounts for 12 percent of the total number of technical program graduates in Texas.

PHASE I

TSTC, supportive of the state mandated studies, undertook a comparative analysis study of the community and technical colleges of Texas. Phase I of the study was published in two volumes in June, 1992.

To facilitate the comparisons and to improve data integrity, technical programs were assigned to 1 of 12 program clusters. The primary technical program clusters identified are listed below:

Medical/Health Care
Biotechnologies
Automotive/Heavy Mechanics
Building Systems & Construction
Applied Service & Business
Related Studies
Information
Energy & Environmental

Laser/Electronics
Manufacturing, Design & Engineering
Aerospace
Agribusiness

The program clusters were designated as either "export-related" or "service-related," depending upon whether the cluster supports businesses and industries which produce goods and services exported out of Texas, or supports businesses and industries which provide services primarily used in Texas.

Using the "export-related" and "service-related" clusters as major divisions of the technical programs, five comparisons were made between TSTC and the community/junior colleges using:

(1) institutional curricula profiles;
(2) "Graduate Percent Yield;"
(3) graduates - also compared by gender, ethnicity and special populations;
(4) "major metropolitan" area institutions (the 29 community/junior college campuses located in the five major metropolitan areas and Beaumont-Port Arthur);
(5) "balance of state " institutions (the 36 community/junior college campuses located in the 239 counties not associated with a major metropolitan area); and
(6) cost per graduate.

Twelve conclusions were drawn from the study findings concerning the differences in technical education at TSTC and technical education at the community/junior colleges. Several of the major findings and conclusions are summarized below:

(1) TSTC offers the majority of its technical programs in the "export-related" technologies, whereas the community/junior colleges have a curricula profile skewed toward "service-related" technologies, especially those programs in the Medical/Health Care and the Applied Service & Business technologies.

(2) Students attending TSTC are much more likely to complete a technical degree or certificate program than students who attend a community/junior college.

(3) TSTC has an exceptional graduation record for minority and special population students from "export-related" technical programs which require a working knowledge of math and science. This finding represents a significant educational achievement for TSTC and supports its instructional methodology and curricula design.

(4) Institutional size, when considered as a factor associated with "major metropolitan" area (large) community/junior colleges and the "balance of state" (smaller) community/junior colleges, did not appear to be significant in differentiating between the program offerings, enrollments, graduates, and "Graduate Percent Yield" for the community/junior colleges. Also, neither the "major metropolitan" area or the

"balance of state" community/junior colleges were as successful in having students graduate as TSTC.

(5) The lower cost per graduate and the higher "Graduate Percent Yield" along with the demonstrated success in meeting the educational needs of minority and special population students make TSTC the most cost-effective, educationally sound, and economically vital two-year public college in Texas.

PHASE II

This report is Phase II of the study. In Phase II, several of the findings of the Phase I comparison between TSTC and the community/junior colleges of Texas are tested to determine their validity. To test the validity of the findings involving the data concerning institutional curricula profiles and "Graduate Percent Yield," the major divisions of the twelve program clusters has been changed. While the Phase I comparisons between TSTC and the community/junior colleges were based on the classification of technical programs within "export-related" and "service-related" clusters, the Phase II comparisons are based on the classification of technical programs within physical science, biological science and social science clusters.

COMPARISON OF THE COMMUNITY/JUNIOR COLLEGES AND TSTC BY PHYSICAL SCIENCE, BIOLOGICAL SCIENCE AND SOCIAL SCIENCE TECHNICAL PROGRAM CLUSTERS

Introduction

The purpose of the Phase II study was to examine and compare differences between the community/junior colleges and TSTC by physical science, biological science and social science technical program clusters. Two analyses were performed: institutional curricula profiles and "Graduate Percent Yield." These analyses were performed to test the validity of the findings in the Phase I study concerning institutional curricula profiles and "Graduate Percent Yield."

Methodology

The data utilized by the Occupational and Institutional Research Division of TSTC for the study were obtained from published reports and official documents of the Texas Higher Education Coordinating Board (Coordinating Board) for the 1990-91 school year and the 1990 Federal fiscal year (Phase I, Volume I, page 5). All enrollment data were based on "declared majors" in technical programs. Also, a list of the active Coordinating Board-approved vocational/technical programs was compiled according to the Texas HEGIS Code designation for each program. A data base of the information was compiled and an institutional curricula profile was built for each two-year college.

Definitions

The following definitions apply to the study and were used when analyzing the findings.

Declared major - a student who has enrolled in a Texas Higher Education Coordinating Board-approved technical program and has stated the intent to complete courses that lead to an associate degree or certificate.

Key descriptive data - for the community/junior colleges and TSTC include the number of programs offered, enrollment and the number of graduates.

Performance indicators - for the purposes of the comparative analysis study, performance indicators for the community/junior colleges and TSTC are the "Graduate Percent Yield" and cost per graduate.

Institutional curricula profiles - for the community/junior colleges and TSTC contain the key descriptive data as distributed among the technical program clusters.

"Graduate Percent Yield" - for the community/junior colleges and TSTC is computed by dividing the annualized number of technical program cluster graduates (degree and certificate) by the technical program cluster enrollment of the previous fall term figure and multiplying by 100.

Results

Results of the Phase II study are shown in issue-specific, aggregated data tables located in Appendix B for various segments of the state and institutional groupings. The tables contain institutional descriptors and performance indicators supported by detailed data compiled for each public two-year college. Each comparison is described in a separate section of the study. Tables containing information specific to each comparison are included in the appropriate sections. A comparison of the community/junior colleges and TSTC by "physical science-based," "biological science-based" and "social science-based" technical program clusters was performed utilizing institutional curricula profiles and "Graduate Percent Yields."

Technical Program Clusters

Historically, postsecondary technical curricula was concentrated in the engineering-related technologies offered by mechanical and technical institutes. This type of curricula has always required a basic foundation in mathematics and science, emphasizing the teaching of scientific principles based on the physical sciences. As a result, physical science-based programs, which are expensive, require a significant investment in equipment and facilities.

As technical education moved into the twentieth century, additional programs have been added to the traditional engineering-related curricula. Hospital-based medical/health care programs, that have laboratory and facility costs shared with teaching hospitals, have broadened the science-based curriculum to include the biological sciences. Although these

programs were traditionally taught by the hospitals, the teaching of the curriculum has been transferred to community/junior and technical colleges because hospital-based medical and health care programs became too expensive for most health care institutions.

To complete the curriculum metamorphosis, programs that support the infrastructure of businesses and industries, such as accounting, management and secretarial programs once offered by business, industry and proprietary schools, have been added to the community/junior and technical college curriculum. These programs generally have lower laboratory and facility costs as compared to the more traditional engineering-related technologies. The majority of these programs do not require a rigid adherence to a "coherent sequence of courses." In many instances, a student can gain a marketable business skill by taking one or two courses which do not encourage completion of a degree. Also, the flexible curriculum of these programs encourages students to enroll part-time, thus lengthening the time it takes to graduate.

In Phase I, technical program clusters were classified as "export-related" or "service-related" to assist in analyzing the impact of graduation rates on businesses and industries in Texas. For the Phase II study, technical program clusters were classified in a more traditional academic manner to assist in analyzing the impact that the curricula has on the graduation rates. The terms "physical science-based," "biological science-based" and "social science-based" were used to classify the technical program clusters for comparative analysis.

"Physical Science-Based" - This term or classification refers to those technical program clusters that require a basic foundation in mathematics and science and where the productive application of scientific principles are taught based on the physical sciences. The technical programs assigned to the "physical science-based" classification are as follows:

Energy & Environmental
Laser/Electronics
Manufacturing, Design and Engineering
Aerospace
Automotive/Heavy Mechanics
Building Systems & Construction

"Biological Science-Based" - This term or classification refers to those technical program clusters that have curricula emphasizing biology. The technical programs assigned to the "biological science-based" classification are as follows:

Medical/Health Care
Biotechnologies
Agribusiness

"Social Science-Based" - This term or classification refers to those technical program clusters that have a business orientation and do not readily fit into the other two classifications. The technical programs assigned to the "social science-based" classification are as follows:

Information
Applied Service & Business
Related Instruction

Findings

Institutional Curricula Profiles.

Table 1A on the following page is a consolidation of the information contained in Appendix B, and contains the institutional curricula profiles for the community/junior colleges and TSTC. The first column contains the titles of the technical program clusters segregated into the "biological science-based" clusters appearing at the top of the table, the "social science-based" clusters" appearing in the middle of the table, and the "physical science-based" clusters appearing at the bottom of the table. The second column contains the community/junior college data, including the number of programs, enrollment and graduates. The third column contains TSTC data, including the number of programs, enrollment and graduates.

Table 1A

Institutional Curricula Profiles for the Community/Junior Colleges and TSTC

	Community/Junior Colleges (65 Campuses)			TSTC (4 Campuses)		
Technical Program Clusters	No. of Programs	Fall 1990 Enrollment	1990-91 Total Graduates	No. of Programs	Fall 1990 Enrollment	1990-91 Total Graduates
Biological Science-Based Clusters						
Medical/Health Care	406	30,370	6,939	7	481	283
Biotechnologies	1	2	0	0	0	0
Agribusiness	57	875	250	5	253	107
****Subtotals****	464	31,247	7,189	12	734	390
Social Science-Based Clusters						
Information	162	13,727	1,457	13	1,207	287
Applied Service & Business	867	46,725	5,656	14	1,074	432
Related Instruction	49	0	2	4	0	0
****Subtotals****	1,078	60,452	7,115	31	2,281	719
Physical Science-Based Clusters						
Energy & Environmental	37	544	53	5	274	84
Laser/Electronics	106	6,205	1,014	14	1,541	402
Manufacturing, Design & Engineering	221	6,494	925	20	1,316	435
Aerospace	40	1,270	227	4	627	114
Automotive/Heavy Mechanics	104	2,175	665	13	827	340
Building Systems & Construction	92	2,428	371	8	470	161
****Subtotals****	600	19,116	3,255	64	5,055	1,536
******Grand Totals******	2,142	110,815	17,559	107	8,070	2,645

As in the Phase I study, it is evident from the data that TSTC has a different institutional profile from the community/junior colleges. Table 1B contains the same information as Table 1A except percentages were used to facilitate the comparison between TSTC and the community/junior colleges.

Table 1B

Institutional Curricula Profiles for the Community/Junior Colleges and TSTC by Percentage

	Community/Junior Colleges (65 Campuses)			TSTC (4 Campuses)		
Technical Program Clusters	No. of Programs (%)	Fall 1990 Enrollment (%)	1990-91 Total Graduates (%)	No. of Programs (%)	Fall 1990 Enrollment (%)	1990-91 Total Graduates (%)
Biological Science-Based Clusters						
Medical/Health Care	18.95	27.41	39.52	6.55	5.96	10.70
Biotechnologies	0.05	N/A	N/A	N/A	N/A	N/A
Agribusiness	2.66	0.79	1.42	4.67	3.13	4.04
****Subtotals****	21.66	28.20	40.94	11.22	9.09	14.74
Social Science-Based Clusters						
Information	7.56	12.39	8.30	12.15	14.96	10.85
Applied Service & Business	40.48	42.16	32.21	13.08	13.31	16.33
Related Instruction	2.29	N/A	0.01	3.74	N/A	N/A
****Subtotals****	50.33	54.55	40.52	28.97	28.27	27.18
Physical Science-Based Clusters						
Energy & Environmental	1.73	0.49	0.30	4.67	3.39	3.18
Laser/Electronics	4.95	5.60	5.77	13.08	19.10	15.20
Manufacturing, Design & Engineering	10.32	5.86	5.27	18.69	16.31	16.45
Aerospace	1.87	1.15	1.29	3.74	7.77	4.31
Automotive/Heavy Mechanics	4.85	1.96	3.79	12.15	10.25	12.85
Building Systems & Construction	4.29	2.19	2.12	7.48	5.82	6.09
****Subtotals****	28.01	17.25	18.54	59.81	62.64	58.08
******Grand Totals******	100.00	100.00	100.00	100.00	100.00	100.00

The majority (50%) of technical programs offered by the community/junior colleges are in the "social science-based" clusters, with the largest concentration of programs (40%) within the Applied Service & Business cluster. The "physical science-based" and "biological science-based" clusters represent 28 percent and 22 percent respectively of the technical

programs offered by the community/junior colleges. The "social science-based" clusters have the largest enrollment (55%), followed by the "biological science-based" clusters (28%) and the "physical science-based" clusters (17%). The "biological science-based" and "social science-based" clusters represented the largest percentage of the graduates (approximately 41% each) for the community/junior colleges, with the "physical science-based" clusters representing only 19 percent of the graduates.

For TSTC, the majority of technical programs offered are in the "physical science-based" clusters (60%). The "social science-based" and "biological science-based" clusters represent 29 percent and 11 percent respectively of the programs offered by TSTC. The order of the technical program clusters did not change with enrollment or graduate numbers. The majority of the TSTC 1990 fall enrollment (63%) and the majority of graduates (58%) were in the "physical science-based" clusters, followed by the "social science-based" clusters (28% of the enrollment, 27% of the graduates) and the "biological science-based" clusters (9% of the enrollment, 15% of the graduates).

Summary Observations

The institutional curricula profile for TSTC is significantly different from that of the community/junior colleges. The institutional curricula profile for the community/junior colleges is strongly concentrated in the "social science-based" technical program clusters. In contrast, TSTC has the greatest percentage of its efforts in the "physical science-based" technical program clusters. This concentration in the "physical science-based" clusters also applies to enrollment and graduates. For the community/junior colleges, the largest enrollment concentration was in the "social science-based" technical programs, while the largest percentage of graduates was in the "biological science-based" technical programs.

"Graduate Percent Yield".

Table 2 on the following page contains the enrollments, the number of graduates, and "Graduate Percent Yield" for each technical program cluster assigned to a "physical science-based," "biological science-based" and "social science-based" cluster for the community/junior colleges and TSTC. The first column contains the technical program clusters within the three science-based clusters. The second column contains the community/junior college

data including enrollment, graduates and "Graduate Percent Yield" for each technical program cluster. The third column contains TSTC data including enrollment, graduates and "Graduate Percent Yield" for each technical program cluster.

Table 2

"Graduate Percent Yield" for TSTC and the Community/Junior Colleges

	Community/Junior Colleges (65 Campuses)			TSTC (4 Campuses)		
Technical Program Clusters	Fall 1990 Enrollment	1990-91 Total Graduates	Graduate Percent Yield (%)	Fall 1990 Enrollment	1990-91 Total Graduates	Graduate Percent Yield (%)
Biological Science-Based Clusters						
Medical/Health Care	30,370	6,939	22.85	481	283	58.84
Biotechnologies	2	0	0.00	0	0	0.00
Agribusiness	875	250	28.57	253	107	42.29
****Subtotals****	31,247	7,189	23.01	734	390	53.13
Social Science-Based Clusters						
Information	13,727	1,457	10.61	1,207	287	23.78
Applied Service & Business	46,725	5,656	12.10	1,074	432	40.22
Related Instruction	0	2	N/A	0	0	N/A
****Subtotals****	60,452	7,115	11.77	2,281	719	31.52
Physical Science-Based Clusters						
Energy & Environmental	544	53	9.74	274	84	30.66
Laser/Electronics	6,205	1,014	16.34	1,541	402	26.09
Manufacturing, Design & Engineering	6,494	925	14.24	1,316	435	33.05
Aerospace	1,270	227	17.87	627	114	18.18
Automotive/Heavy Mechanics	2,175	665	30.57	827	340	41.11
Building Systems & Construction	2,428	371	15.28	470	161	34.26
****Subtotals****	19,116	3,255	17.03	5,055	1,536	30.39
******Grand Totals******	110,815	17,559	15.85	8,070	2,645	32.78

The total "Graduate Percent Yield" for the community/junior colleges was 16 percent. The "biological science-based" clusters had the highest "Graduate Percent Yield" for the three program cluster areas with 23 percent, followed by the "physical science-based" clusters with 17 percent, and the "social science-based" clusters with 12 percent.

In comparison, TSTC had a total "Graduate Percent Yield" of 33 percent. The "biological science-based" clusters had the highest "Graduate Percent Yield" for the three program cluster areas with 53 percent, followed by the "social science-based" clusters with 32 percent, and the "physical science-based" clusters with 30 percent.

An interesting outcome of the comparison of "Graduate Percent Yields" for the community/junior colleges and TSTC was those cluster areas with the highest enrollment had the lowest "Graduate Percent Yield." For the community/junior colleges, the "social science-based" clusters had the highest enrollment (60,452) and the lowest "Graduate Percent Yield" (12%). For TSTC, the "physical science-based" clusters had the highest enrollment (5,055) and the lowest "Graduate Percent Yield" (30%).

Also, the "biological science-based" clusters yielded some interesting numbers in the comparison. For the community/junior colleges this program cluster area had the second highest enrollment (31,247) and the highest "Graduate Percent Yield" (23%). For TSTC, this cluster area had the lowest enrollment (734) and the highest "Graduate Percent Yield" (53%).

Summary Observations

As was determined in the previous study and supported in this comparison, TSTC had a significantly better success rate than the community/junior colleges in having students complete a "coherent program of study" as identified in the National Assessment of Vocational Education report (Phase I, Volume I, page 4). In the previous study, the higher graduation success rate was attributed to (1) TSTC curricula design, (2) instructional strategies and (3) student-required extensive laboratory experience utilized for all technical programs that closely parallels the medical/health care model. This comparison supports the previous findings. The Medical/Health Care technical program cluster contains programs that, regardless of where taught, would have the same curricula and learning outcomes because of mandated accreditation by state and national medical/health care

associations. With structured curricula and extensive laboratory experience required, community/junior college students enrolled in a Medical/Health Care program would not be inclined to "mill around." The students would be enrolled in a "coherent program of study" that would keep them on-track to graduate. The evidence that a "coherent program of study" helps students graduate is found in the "Graduate Percent Yield" for that program. For the community/junior colleges, the Medical/Health Care technical program cluster had a Fall 1990 enrollment of 30,370 and a "Graduate Percent Yield" of 23 percent. Of the cluster areas, the "biological science-based" technical program clusters had the highest "Graduate Percent Yield" for the community/junior colleges

SUMMARY

Texas State Technical College is undergoing reviews by the Texas Higher Education Coordinating Board and a subcommittee of the House Committee on Higher Education. These reviews were undertaken due to a concern that unnecessary duplication exists in programs offered by TSTC and the Texas community/junior colleges. TSTC undertook a comparative analysis study of the community/junior colleges of Texas and TSTC. Phase I of the study was published in June 1992. Through the study, TSTC was found to have a different institutional curricula profile from the community/junior colleges. TSTC also had an exceptional success rate in having students complete a "coherent program of study" and graduate, especially students belonging to special population groups. Lastly, TSTC was found to have a comparatively lower cost per graduate than the community/junior colleges.

This report is Phase II of the study. In Phase II, the validity of the Phase I findings involving data concerning institutional curricula profiles and "Graduate Percent Yield" were tested. The Phase II comparisons between TSTC and the community/junior colleges of Texas were based on the classification of technical programs within physical science, biological science and social science clusters.

Results of the TSTC study are shown in issue-specific, aggregated data tables located in Appendix B of the report. The tables contain institutional descriptors and performance indicators for the community/junior colleges and TSTC.

In these comparisons, TSTC was found to have a different institutional curricula profile from the community/junior colleges. Where the community/junior college technical program offerings are concentrated in the "social science-based" technical program clusters, TSTC technical program offerings are concentrated in the "physical science-based" technical program clusters.

TSTC was also found to have a significantly better success rate in having students complete a "coherent program of study." This success rate was attributed to TSTC curricula design, instructional strategies and student-required extensive laboratory experience. This model is utilized for all technical programs and closely parallels the medical/health care model. This comparison supports the previous findings. The community/junior colleges have the highest "Graduate Percent Yield" within the "biological science-based" technical program clusters.

CONCLUSIONS

1. **The Phase II study supports the previous findings that Texas State Technical College has a significantly different curricula profile than the community/junior colleges. Within the Phase II study, this difference is reflective of "physical science-based" technologies (e.g., aerospace, lasers, electronics, energy and environmental)** while the curricula profile of the community/junior colleges emphasizes the "social science-based" technologies (e.g., marketing, office skills, criminal justice). The "physical science-based" technologies represent those programs that require a basic foundation in mathematics and science and where the productive application of scientific principles are taught based on the physical sciences. As a result, these programs are expensive and typically require a significant investment in equipment and facilities.

2. **Community/junior colleges have a curricula profile skewed toward "social science-based" technologies, especially those programs in the Applied Service & Business technologies.** A preliminary analysis of trend data found a continued skewing of technical programs and enrollments toward "social science-based" technologies. The reason is that the Coordinating Board funding formula, which is enrollment-driven, favors those programs with the largest enrollments, lowest capital costs, best students who require fewer support services, opportunity to utilize part-time faculty to reduce salary costs, and programs which have the least risk of failure.

3. **Community/junior colleges have the highest "Graduate Percent Yield" in the "biological science-based" programs, particularly the Medical/Health Care technologies.** This finding supports the Phase I study conclusion that a "coherent program of study" increases the chances that a student will complete a certificate or a degree.

4. **The Phase II study reaffirms the Phase I conclusion that students attending Texas State Technical College are much more likely to complete a technical degree or certificate program than students who attend a community/junior college.** Graduation or completion of a "coherent program of study" from a quality technical program was identified by the National Assessment of Vocational Education study in 1989 to be the greatest problem facing technical education in the United States. The problem was most acute for minority students and special population students who were the least likely to graduate.

5. **The Phase II study reemphasizes the unique curricula design and instructional delivery system TSTC offers students.** At TSTC, students are required to take **more courses** with **more contact hours** to complete a degree, **spend more time** in completing laboratory assignments and projects, and be encouraged to graduate on-time with their class. **While some technical programs and courses may have similar titles, there is no unwarranted duplication of courses or programs.**

APPENDIX A

TECHNICAL PROGRAM CLUSTERING METHODOLOGY

Program performance information received from the Texas Higher Education Coordinating Board and utilized to conduct this study was primarily identified by the Texas HEGIS code. Each HEGIS code has a corresponding program name. Programs were grouped into "program clusters" according to definitions originally developed by Texas Innovation Network System (TINS) in their work to identify advanced and emerging technologies in 1990. The "program clusters" adopted from the TINS effort include the following:

- Information Technologies
- Energy and Environmental Technologies
- Medical/Health Care Technologies
- Laser/Electronics Technologies
- Manufacturing, Design and Engineering Technologies
- Biotechnologies

In order to encompass the remainder of technical program offerings in Texas, several additional "program clusters' were designated based on generally accepted groupings of programs. These additional "program clusters" include:

- Aerospace Technologies
- Automotive/Heavy Mechanics Technologies
- Building Systems and Construction Technologies
- Agribusiness Technologies
- Applied Service and Business Technologies
- Related Instruction

The "Related Instruction" cluster was designated for those contact hours taught in Related Instruction courses that could not be readily classified into one of the other clusters. Generally, "Related Instruction" has no declared major enrollments or graduates.

These twelve program clusters were then classified as physical science-based, biological science-based, or social science-based depending on the curricula emphasis. The result of this classification is as follows:

Physical Science Clusters

Laser/Electronics
Manufacturing, Design & Engineering
Aerospace
Automotive/Heavy Mechanics
Building Systems & Construction

Biological Science Clusters

Medical/Health Care
Biotechnologies
Agribusiness

Social Science Clusters

Information
Applied Service & Business
Related Instruction

The following pages contain a listing of specific programs which have been assigned to the above program clusters.

LISTING OF 1990-91 ACTIVE STATEWIDE TECHNICAL PROGRAMS BY SCIENCE CLUSTER AND TINS CLUSTER

PHYSICAL SCIENCE CLUSTERS

LASER/ELECTRONICS

Program Name
Industrial Electricity/Electronics
Radio and Television Repair
Biomedical Equipment Technology
Instrumentation Technology
Electrical Technology
Electronics Technology
Laser-Electro Optics

MANUFACTURING, DESIGN & ENGINEERING

Program Name
Drafting
Industrial Instruments
Machine Shop
Pottery Production
Welding
Maintenance Engineering
Interior Decorating
Pneudraulics Mechanic
Industrial Management
Production Management
Civil and Highway Technology
Mechanical Technology
Quality Control Technology
Fluid Power Technology
Engineering Technology
Corrosion Technology
Architectural Drafting Technology
Drafting and Design Technology
Technical Illustration
Electro-Mechanical Technology
Electronic Manufacturing Technology

AEROSPACE

Program Name
Air Traffic Control
Sheet Metal
Airframe and Power Mechanic
Avionics
Commercial Pilot

AUTOMOTIVE/HEAVY MECHANICS

Program Name
Auto Body Repair
Auto Mechanics
Diesel Mechanics
Heavy Construction Equipment Mechanics
Automotive Parts Specialist

BUILDING SYSTEMS & CONSTRUCTION

Program Name
Construction and Maintenance
Masonry
Plumbing
Air Conditioning and Heating
Construction Management
Construction Technology
Surveying Technology

ENERGY & ENVIRONMENTAL

Program Name
Occupational Safety and Health
Environmental Health Technology
Chemical Technology
Oceanographic/Marine Technology
Oil and Gas Technology
Petroleum and Chemical Process
Petroleum Technology
Environmental Technology
Nuclear Technology
Geological Technology
Electrical Power Technology

BIOLOGICAL SCIENCE CLUSTERS

MEDICAL/HEALTH CARE

Program Name
Vocational Nursing
Nurse Aide
Unit Clerk
Social Care Specialist
Associate Degree Nursing
Dental Assistant
Dental Laboratory Technology
Respiratory Therapy Technology
Medical Assisting Technology
Medical Laboratory Assistant
Medical Laboratory Technology
Mental Health Technology
Occupational Therapy
Surgical Technology
Physical Therapy Technology
Radiologic Technology
Dental Hygiene
Ophthalmic Dispensing
Nuclear Medicine Technology
Emergency Medical Technician
Histologic Technology
Mortuary Science
Hospital Pharmacy Technology

MEDICAL/HEALTH CARE (cont.)

Program Name
Radiation Therapy
Interpreter Training
Diagnostic Medical Sonography
Physical Fitness Technology
Health Care Management
Nursing Home Administration

BIOTECHNOLOGY

Program Name
Biological Laboratory Technology

AGRIBUSINESS

Program Name
Agri-Business Technology
Agricultural Chemical Technology
Animal Medical Technology
Farm and Ranch Management
Horticulture
Meat Processing
Forestry Technician

SOCIAL SCIENCE CLUSTERS

INFORMATION

Program Name
Data Processing Programmer
Computer and Console Operator
Microcomputing Applications Technology
Commercial Art
Printing
Radio-TV Production Technology

RELATED INSTRUCTION

Program Name
Related Instruction

APPLIED SERVICE & BUSINESS

Program Name
Alteration and Tailoring
Child Care/Child Development
Dietitian Aide
Fashion Design
Interior Design
Credit and Collections
Commercial Transportation

APPLIED SERVICE & BUSINESS (cont.)

Program Name
Real Estate
Restaurant Management
Hotel/Motel Management
Marketing
Checker-Cashier
Insurance
Management
Aviation Management
Fashion Merchandising
Food Marketing
Banking Management
Export-Import Management
Title Clerk (Mineral Lease)
Accounting and Computing
General Business (Bus. Mgmt.)
General Office Clerical
Stenographic & General Clerical
Specialized Secretarial
Air Res. Ag.; Off. and System
Medical Records/Transcription
Legal Assistant
Court Reporting

APPLIED SERVICE & BUSINESS (cont.)

Program Name
Records Management
Word Processing
Appliance Service and Repair
Cook/Chef
Cosmetology
Culinary Arts
Horology
Jewelry Craft
Photography
Piano Tuning
Coin-Operated Machine Repair
Water Utilities Operation
Upholstery
Truck and Heavy Equipment Operations
Tailoring
Small Engine Repair
Barbering
Saddle and Tack Making
Fire Protection Technology
Law Enforcement
Corrections
Security Guards
Technical Communications
Commercial Music
Jewelry Craft and Gemology
Music Instr. Technology
Teacher Aide
Recreational Aide
Municipal Administration
Postal Service Technology

APPENDIX B

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL TWO-YEAR PUBLIC COLLEGES

PCLSTOTL

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Statewide Composites for all two-year public colleges *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	413	30851	37693	7222	3965	3257	23.41 %		0	13874346	$ 59,763,883	$ 5.59	$ 8,275
BIOTECHNOLOGIES	1	2	28	0	0	0	0.00 %		0	4512	$ 21,054	$ 6.06	N/A
AGRIBUSINESS	62	1128	1118	357	121	236	31.65 %	*	35712	862528	$ 2,775,196	$ 5.44	$ 7,774
* Biological Science Subtotals *	476	31981	38839	7579	4086	3493	23.70 %	*	35712	14541386	$ 62,560,133	$ 5.59	$ 8,254
* Social Sciences *													
INFORMATION	175	14934	14485	1744	1179	565	11.68 %	*	210800	9484899	$ 36,423,010	$ 4.99	$ 20,885
APPLIED SERVICE & BUSINESS	881	47799	47689	6088	4152	1936	12.74 %	*	113376	18556046	$ 56,888,832	$ 3.98	$ 9,344
RELATED INSTRUCTION	53	0	0	2	0	2	N/A	*	12000	1795880	$ 5,448,338	$ 3.94	$***,***
* Social Science Subtotals *	1109	62733	62174	7834	5331	2503	12.49 %	*	336176	29836825	$ 98,759,980	$ 4.30	$ 12,607
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	42	918	920	137	128	9	16.75 %	*	336	367060	$ 1,553,517	$ 5.50	$ 11,340
LASER/ELECTRONICS	120	7.46	7559	1416	1038	378	18.28 %	*	30752	3543952	$ 12,473,811	$ 4.57	$ 8,809
MANUFACTURING, DESIGN & ENGR.	241	7810	8021	1360	831	529	17.41 %	*	137920	4375412	$ 18,253,549	$ 5.42	$ 13,422
AEROSPACE	44	1897	1991	341	188	153	17.98 %		0	1178627	$ 8,680,912	$ 7.36	$ 19,592
AUTOMOTIVE/HEAVY MECHANICS	117	3002	2946	1005	248	757	33.48 %	*	131040	2353472	$ 8,503,298	$ 4.69	$ 8,461
BUILDING SYSTEMS & CONST.	100	2898	2806	532	196	336	18.36 %	*	23136	1445256	$ 4,978,103	$ 4.47	$ 9,357
* Physical Science Subtotals *	664	24171	24243	4791	2629	2162	19.82 %	*	323184	13263779	$ 52,443,190	$ 5.13	$ 10,946
*** Grand Totals ***	2249	118885	125256	20204	12046	8158	16.99 %		695072	57641990	$213,763,303	$ 4.82	$ 10,580

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL TEXAS COMMUNITY COLLEGES (EXCLUDES TSTC CAMPUSES) PCLSALLX

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the Balance of the State *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	406	30370	37215	6939	3942	2997	22.85 %		0	13460548	$ 58,162,769	$ 5.81	$ 8,382
BIOTECHNOLOGIES	1	2	28	0	0	0	0.00 %		0	4512	$ 21,054	$ 6.06	N/A
AGRIBUSINESS	57	875	965	250	97	153	28.57 %	*	35712	482720	$ 2,022,017	$ 5.44	$ 8,088
* Biological Science Subtotals *	464	31247	38212	7189	4039	3150	23.01 %	*	35712	13953878	$ 60,205,840	$ 5.80	$ 8,375
* Social Sciences *													
INFORMATION	162	13727	13440	1457	947	510	10.61 %	*	210800	8581239	$ 32,850,372	$ 4.99	$ 22,615
APPLIED SERVICE & BUSINESS	867	46725	46692	5656	4087	1569	12.10 %	*	113376	17640638	$ 54,014,020	$ 3.98	$ 9,550
RELATED INSTRUCTION	49	0	0	2	0	2	N/A	*	12000	1171236	$ 3,553,293	$ 3.94	$***,***
* Social Science Subtotals *	1078	60452	60132	7115	5034	2081	11.77 %	*	336176	27393113	$ 90,517,685	$ 4.29	$ 12,722
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	37	544	567	53	46	7	9.74 %	*	336	141808	$ 595,324	$ 5.45	$ 11,233
LASER/ELECTRONICS	106	6205	6178	1014	704	310	16.34 %	*	30752	2330188	$ 8,049,549	$ 4.49	$ 7,938
MANUFACTURING, DESIGN & ENGR.	221	6494	6911	925	547	378	14.24 %	*	137920	3282524	$ 13,737,110	$ 5.43	$ 14,851
AEROSPACE	40	1270	1359	227	116	111	17.87 %		0	887535	$ 3,941,820	$ 7.87	$ 17,365
AUTOMOTIVE/HEAVY MECHANICS	104	2175	2220	665	210	455	30.57 %	*	131040	1569212	$ 5,662,817	$ 4.69	$ 8,516
BUILDING SYSTEMS & CONST.	92	2428	2460	371	164	207	15.28 %	*	23138	1078280	$ 3,672,543	$ 4.42	$ 9,899
* Physical Science Subtotals *	600	19116	19693	3255	1787	1468	17.03 %	*	323184	9069527	$ 35,659,163	$ 5.11	$ 10,955
*** Grand Totals ***	2142	110815	118037	17559	10860	6699	15.85 %		695072	50416518	$186,382,888	$ 4.80	$ 10,615

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR MAJOR METROPOLITAN REGIONS ONLY

PCLSMET

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the Six Major Metropolitan Regions *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	235	14673	18780	3097	2004	1093	21.11 %		0	6373462	$ 27,943,085	$ 5.69	$ 9,023
BIOTECHNOLOGIES	1	2	28	0	0	0	0.00 %		0	4512	$ 21,054	$ 6.06	N/A
AGRIBUSINESS	31	457	460	102	48	54	22.32 %	*	32112	210960	$ 883,669	$ 5.44	$ 8,663
* Biological Science Subtotals *	267	15132	19268	3199	2052	1147	21.14 %	*	32112	6588934	$ 28,847,808	$ 5.69	$ 9,016
* Social Sciences *													
INFORMATION	90	6945	8607	846	534	312	9.46 %	*	111456	5322308	$ 20,365,013	$ 4.97	$ 24,072
APPLIED SERVICE & BUSINESS	481	29739	29395	3137	2428	709	10.55 %	*	30752	10761723	$ 33,031,899	$ 3.96	$ 10,530
RELATED INSTRUCTION	25	0	0	0	0	0	N/A	*	11864	744084	$ 2,257,339	$ 3.94	N/A
* Social Science Subtotals *	596	36684	38002	3983	2962	1021	10.30 %	*	153672	16846393	$ 55,654,251	$ 4.29	$ 13,973
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	24	332	351	30	26	4	9.04 %		0	90416	$ 363,009	$ 5.50	$ 12,767
LASER/ELECTRONICS	62	4707	4637	742	512	230	15.76 %	*	29120	1561656	$ 5,556,232	$ 4.56	$ 7,491
MANUFACTURING, DESIGN & ENGR.	131	4438	4698	586	349	237	13.20 %	*	83520	2210644	$ 8,306,854	$ 5.47	$ 15,862
AEROSPACE	33	1095	1159	183	91	92	16.71 %		0	615015	$ 3,511,462	$ 7.42	$ 19,188
AUTOMOTIVE/HEAVY MECHANICS	50	1297	1326	413	150	263	31.64 %	*	60208	928606	$ 3,334,783	$ 4.66	$ 8,075
BUILDING SYSTEMS & CONST.	62	1870	1855	230	122	108	12.30 %		0	754560	$ 2,602,689	$ 4.48	$ 11,316
* Physical Science Subtotals *	362	13739	14026	2184	1250	934	15.90 %	*	192848	6181119	$ 24,697,129	$ 5.19	$ 11,308
*** Grand Totals ***	1225	67555	71296	9366	6264	3102	13.66 %		378832	29616446	$109,199,186	$ 4.79	$ 11,659

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR THE BALANCE OF THE STATE EXCLUDING TSTC CAMPUSES AND METROPOLITAN REGIONS PCLSBOS

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the Balance of the State *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	171	15697	18439	3842	1938	1904	24.48 %		0	7093184	$ 30,219,684	$ 5.53	$ 7,866
AGRIBUSINESS	28	418	505	148	49	99	35.41 %	*	3800	271760	$ 1,138,348	$ 5.44	$ 7,692
* Biological Science Subtotals *	197	16115	18944	3990	1987	2003	24.76 %	*	3800	7364944	$ 31,358,032	$ 5.53	$ 7,859
* Social Sciences *													
INFORMATION	72	4782	4833	611	413	198	12.78 %	*	99344	3258633	$ 12,585,359	$ 5.02	$ 20,598
APPLIED SERVICE & BUSINESS	386	16986	17297	2519	1659	860	14.83 %	*	82624	6858915	$ 20,982,121	$ 3.97	$ 8,330
RELATED INSTRUCTION	24	0	0	2	0	2	N/A	*	336	427172	$ 1,295,954	$ 3.94	$647,977
* Social Science Subtotals *	482	21768	22130	3132	2072	1060	14.39 %	*	182304	10544720	$ 34,863,434	$ 4.29	$ 11,131
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	13	212	216	23	20	3	10.65 %	*	338	51392	$ 212,315	$ 5.37	$ 9,231
LASER/ELECTRONICS	44	1498	1539	272	192	80	18.16 %	*	1632	748332	$ 2,491,317	$ 4.32	$ 9,159
MANUFACTURING, DESIGN & ENGR.	90	2056	2213	339	198	141	18.49 %	*	54400	1071880	$ 4,430,156	$ 5.37	$ 13,068
AEROSPACE	7	175	200	44	25	19	25.14 %		0	52520	$ 430,358	$10.64	$ 9,781
AUTOMOTIVE/HEAVY MECHANICS	54	878	894	252	60	192	28.70 %	*	50832	640604	$ 2,328,034	$ 4.72	$ 9,238
BUILDING SYSTEMS & CONST.	30	556	605	141	42	99	25.27 %	*	23136	323680	$ 1,069,854	$ 4.29	$ 7,588
* Physical Science Subtotals *	238	5377	5667	1071	537	534	19.92 %	*	130336	2888408	$ 10,962,034	$ 4.93	$ 10,235
*** Grand Totals ***	917	43260	46741	8193	4596	3597	18.94 %		316240	20798072	$ 77,183,500	$ 4.82	$ 9,421

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR BALANCE OF THE STATE INCLUDING TSTC CAMPUSES

PCLSBOSW

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT 877%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for Regions 1 through 4 including TSTC campuses *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	178	16178	18913	4125	1961	2164	25.50 %		0	7500884	$ 31,820,798	$ 5.51	$ 7,714
AGRIBUSINESS	31	671	658	255	73	182	38.00 %	*	3600	451566	$ 1,891,527	$ 5.44	$ 7,418
* Biological Science Subtotals *	209	16849	19571	4380	2034	2346	26.00 %	*	3600	7952452	$ 33,712,325	$ 5.51	$ 7,697
* Social Sciences *													
INFORMATION	85	5989	5878	898	645	253	14.99 %	*	99344	4162293	$ 16,057,997	$ 5.01	$ 17,882
APPLIED SERVICE & BUSINESS	400	18060	18294	2951	1724	1227	16.34 %	*	82624	7774323	$ 23,856,733	$ 3.99	$ 8,084
RELATED INSTRUCTION	28	0	0	2	0	2	N/A	*	336	1051816	$ 3,190,999	$ 3.94	$***,***
* Social Science Subtotals *	513	24049	24172	3851	2369	1482	16.01 %	*	182304	12988432	$ 43,105,729	$ 4.31	$ 11,193
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	18	486	569	107	102	5	22.02 %	*	336	276644	$ 1,170,508	$ 5.49	$ 10,939
LASER/ELECTRONICS	58	3039	2922	674	526	148	22.18 %	*	1632	1962096	$ 6,915,579	$ 4.58	$ 10,261
MANUFACTURING, DESIGN & ENGR.	110	3372	3320	774	482	292	22.95 %	*	54400	2164768	$ 8,946,595	$ 5.37	$ 11,559
AEROSPACE	11	802	832	158	97	61	19.70 %		0	563612	$ 3,169,450	$ 7.30	$ 20,060
AUTOMOTIVE/HEAVY MECHANICS	67	1705	1620	592	98	494	34.72 %	*	50832	1424864	$ 5,168,515	$ 4.71	$ 8,731
BUILDING SYSTEMS & CONST.	38	1028	951	302	74	228	29.38 %	*	23136	690676	$ 2,375,414	$ 4.47	$ 7,866
* Physical Science Subtotals *	302	10432	10217	2607	1379	1228	24.99 %	*	130336	7082660	$ 27,746,061	$ 5.09	$ 10,643
*** Grand Totals ***	1024	51330	53960	10838	5782	5056	21.11 %		316240	28023544	$104,564,115	$ 4.85	$ 9,648

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR TSTC CAMPUSES ONLY

PCLSTSTC

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the four TSTC Campuses *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	7	481	474	283	23	260	58.84 %		0	407700	$ 1,601,114	$ 5.10	$ 5,658
AGRIBUSINESS	5	253	153	107	24	83	42.29 %		0	179608	$ 753,179	$ 5.44	$ 7,039
* Biological Science Subtotals *	12	734	627	390	47	343	53.13 %		0	587508	$ 2,354,293	$ 5.20	$ 6,037
* Social Sciences *													
INFORMATION	13	1207	1045	287	232	55	23.78 %		0	903660	$ 3,472,636	$ 4.99	$ 12,100
APPLIED SERVICE & BUSINESS	14	1074	997	432	65	367	40.22 %		0	915408	$ 2,874,612	$ 4.08	$ 6,654
RELATED INSTRUCTION	4	0	0	0	0	0	N/A		0	624644	$ 1,695,045	$ 3.94	N/A
* Social Science Subtotals *	31	2281	2042	719	297	422	31.52 %		0	2443712	$ 8,242,295	$ 4.38	$ 11,464
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	5	274	353	84	82	2	30.66 %		0	225252	$ 958,193	$ 5.52	$ 11,407
LASER/ELECTRONICS	14	1541	1383	402	334	68	26.09 %		0	1213764	$ 4,424,262	$ 4.73	$ 11,006
MANUFACTURING, DESIGN & ENGR.	20	1316	1110	435	284	151	33.05 %		0	1092888	$ 4,516,439	$ 5.37	$ 10,383
AEROSPACE	4	627	632	114	72	42	18.18 %		0	511092	$ 2,739,092	$ 6.96	$ 24,027
AUTOMOTIVE/HEAVY MECHANICS	13	827	726	340	38	302	41.11 %		0	784260	$ 2,840,481	$ 4.70	$ 8,354
BUILDING SYSTEMS & CONST.	8	470	346	161	32	129	34.26 %		0	366996	$ 1,305,560	$ 4.62	$ 8,109
* Physical Science Subtotals *	64	5055	4550	1536	842	694	30.39 %		0	4194252	$ 16,784,027	$ 5.20	$ 10,927
*** Grand Totals ***	107	8070	7219	2645	1186	1459	32.76 %		0	7225472	$ 27,380,615	$ 4.92	$ 10,352

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL COMMUNITY COLLEGES IN REGION 1 (EXCLUDING METRO COLLEGES) PCLSREG1

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for Region 1 (North, East, Central & Gulf Coast) *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	84	8522	9673	2142	1145	997	25.13 %		0	3961907	$ 16,990,264	$ 5.57	$ 7,932
AGRIBUSINESS	16	249	279	94	26	68	37.75 %	*	3600	150552	$ 630,631	$ 5.44	$ 6,709
* Biological Science Subtotals *	100	8771	9952	2236	1171	1065	25.49 %	*	3600	4112459	$ 17,620,895	$ 5.56	$ 7,861
* Social Sciences *													
INFORMATION	39	2436	2612	327	192	135	13.42 %	*	80192	1926857	$ 7,433,310	$ 5.01	$ 22,732
APPLIED SERVICE & BUSINESS	192	7138	7796	1238	769	469	17.34 %	*	80160	3491076	$ 10,797,416	$ 4.02	$ 8,722
RELATED INSTRUCTION	10	0	0	0	0	0	N/A		0	131536	$ 399,052	$ 3.94	N/A
* Social Science Subtotals *	241	9574	10408	1565	961	604	16.35 %	*	160352	5549469	$ 18,629,778	$ 4.36	$ 11,904
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	5	41	44	5	5	0	12.20 %		0	11840	$ 50,783	$ 5.57	$ 10,157
LASER/ELECTRONICS	21	696	766	148	97	51	21.26 %	*	1632	291204	$ 966,419	$ 4.31	$ 6,530
MANUFACTURING, DESIGN & ENGR.	50	1241	1279	242	147	95	19.50 %	*	33760	656264	$ 2,706,340	$ 5.36	$ 11,183
AEROSPACE	5	147	165	43	24	19	29.25 %		0	43784	$ 358,718	$10.64	$ 8,342
AUTOMOTIVE/HEAVY MECHANICS	25	291	348	112	34	78	38.49 %	*	26592	229136	$ 831,174	$ 4.71	$ 7,421
BUILDING SYSTEMS & CONST.	15	260	306	81	21	60	31.15 %	*	23136	152208	$ 509,291	$ 4.35	$ 6,288
* Physical Science Subtotals *	121	2676	2908	631	328	303	23.58 %	*	85120	1384436	$ 5,422,725	$ 5.09	$ 8,594
*** Grand Totals ***	462	21021	23268	4432	2460	1972	21.08 %		249072	11046364	$ 41,673,398	$ 4.90	$ 9,403

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL COMMUNITY COLLEGES IN REGION 2 - SOUTH TEXAS PGLSREG2

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for Region 2 (South Texas) *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	31	2699	3299	593	299	294	21.97 %		0	1152152	$ 4,880,294	$ 5.50	$ 8,230
* Biological Science Subtotals *	31	2699	3299	593	299	294	21.97 %		0	1152152	$ 4,880,294	$ 5.50	$ 8,230
* Social Sciences *													
INFORMATION	8	893	895	109	87	22	12.21 %		0	525680	$ 2,007,678	$ 4.96	$ 18,419
APPLIED SERVICE & BUSINESS	72	4352	4296	579	423	156	13.30 %		0	1461587	$ 4,420,838	$ 3.93	$ 7,635
RELATED INSTRUCTION	4	0	0	2	0	2	N/A		0	144712	$ 439,028	$ 3.94	$219,514
* Social Science Subtotals *	84	5245	5191	690	510	180	13.16 %		0	2131979	$ 6,867,542	$ 4.18	$ 9,953
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	3	76	79	7	7	0	9.21 %		0	17088	$ 56,710	$ 4.31	$ 8,101
LASER/ELECTRONICS	9	166	183	40	21	19	24.10 %		0	211848	$ 702,241	$ 4.30	$ 17,556
MANUFACTURING, DESIGN & ENGR.	13	448	550	40	24	16	6.93 %		0	203824	$ 855,244	$ 5.50	$ 21,381
AUTOMOTIVE/HEAVY MECHANICS	8	206	204	43	8	35	20.87 %		0	142540	$ 518,401	$ 4.72	$ 12,056
BUILDING SYSTEMS & CONST.	6	139	139	34	11	23	24.46 %		0	94512	$ 307,835	$ 4.23	$ 9,054
* Physical Science Subtotals *	39	1035	1155	164	71	93	15.85 %		0	667812	$ 2,440,431	$ 4.75	$ 14,881
*** Grand Totals ***	154	8979	9645	1447	880	567	16.12 %		0	3951943	$ 14,188,237	$ 4.66	$ 9,805

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL COMMUNITY COLLEGES IN REGION 3 - PANHANDLE

PCLSREG3

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT 877%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for Region 3 (Panhandle) *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	24	2541	3074	668	279	389	28.29 %		0	1113137	$ 4,656,140	$ 5.48	$ 8,973
AGRIBUSINESS	5	94	97	32	11	21	34.04 %		0	57944	$ 242,716	$ 5.44	$ 7,585
* Biological Science Subtotals *	29	2635	3171	700	290	410	26.57 %		0	1171081	$ 4,900,856	$ 5.43	$ 7,001
* Social Sciences *													
INFORMATION	13	722	684	109	78	31	15.10 %	*	19152	406800	$ 1,596,456	$ 5.10	$ 14,646
APPLIED SERVICE & BUSINESS	58	2443	2360	337	215	122	13.79 %		0	908496	$ 2,756,591	$ 3.94	$ 8,180
RELATED INSTRUCTION	3	0	0	0	0	0	N/A		0	90428	$ 274,341	$ 3.94	N/A
* Social Science Subtotals *	74	3165	3044	446	293	153	14.09 %	*	19152	1405724	$ 4,627,388	$ 4.26	$ 10,375
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	2	26	27	3	3	0	11.54 %		0	7712	$ 35,960	$ 6.08	$ 11,995
LASER/ELECTRONICS	9	412	363	58	56	2	14.08 %		0	165920	$ 559,285	$ 4.38	$ 9,643
MANUFACTURING, DESIGN & ENGR.	11	156	177	40	13	27	25.64 %	*	20640	90464	$ 387,073	$ 5.56	$ 9,677
AUTOMOTIVE/HEAVY MECHANICS	6	150	137	53	8	45	35.33 %	*	24240	107792	$ 394,351	$ 4.75	$ 7,441
BUILDING SYSTEMS & CONST.	3	67	58	9	7	2	13.43 %		0	28192	$ 91,824	$ 4.23	$ 10,203
* Physical Science Subtotals *	31	811	782	163	87	76	20.10 %	*	44880	400080	$ 1,468,519	$ 4.77	$ 9,009
*** Grand Totals ***	134	6611	6977	1309	670	639	19.80 %		64032	2976885	$ 10,996,763	$ 4.80	$ 8,401

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL COMMUNITY COLLEGES IN REGION 4 - WEST TEXAS EXC. EL PASO PCLSREG4

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT 877%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for Region 4 (West Texas excluding El Paso) *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	32	1935	2393	439	215	224	22.69 %		0	865988	$ 3,690,986	$ 5.54	$ 8,408
AGRIBUSINESS	5	75	129	22	12	10	29.33 %		0	63264	$ 265,001	$ 5.44	$ 12,046
* Biological Sciences Subtotals *	37	2010	2522	461	227	234	22.94 %		0	929252	$ 3,955,987	$ 5.53	$ 8,581
* Social Sciences *													
INFORMATION	12	731	642	66	56	10	9.03 %		0	399296	$ 1,547,915	$ 5.03	$ 23,453
APPLIED SERVICE & BUSINESS	64	3053	2845	365	252	113	11.96 %	*	2464	997756	$ 3,007,278	$ 3.91	$ 8,239
RELATED INSTRUCTION	7	0	0	0	0	0	N/A	*	336	60496	$ 183,533	$ 3.94	N/A
* Social Science Subtotals *	83	3784	3487	431	308	123	11.39 %	*	2800	1457548	$ 4,738,726	$ 4.22	$ 10,995
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	3	69	66	8	5	3	11.59 %	*	336	14752	$ 68,836	$ 6.06	$ 8,605
LASER/ELECTRONICS	5	224	227	26	18	8	11.61 %		0	79360	$ 263,372	$ 4.31	$ 10,130
MANUFACTURING, DESIGN & ENGR.	16	211	207	17	14	3	8.06 %		0	123328	$ 481,499	$ 5.07	$ 28,323
AEROSPACE	2	28	35	1	1	0	3.57 %		0	8736	$ 71,640	$10.65	$ 71,640
AUTOMOTIVE/HEAVY MECHANICS	15	231	205	44	10	34	19.05 %		0	161136	$ 584,108	$ 4.71	$ 13,275
BUILDING SYSTEMS & CONST.	6	92	102	17	3	14	18.48 %		0	48768	$ 160,904	$ 4.28	$ 9,465
* Physical Science Subtotals *	47	855	842	113	51	62	13.22 %	*	336	436080	$ 1,630,359	$ 4.88	$ 14,428
*** Grand Totals ***	167	6649	6851	1005	586	419	15.12 %		3136	2822880	$ 10,325,072	$ 4.75	$ 10,274

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL COMMUNITY COLLEGES IN THE AUSTIN METRO REGION

PCLSREGA

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the Austin Metropolitan Region *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	11	1287	1559	238	166	72	18.49 %		0	389712	$ 1,630,184	$ 5.43	$ 6,850
* Biological Science Subtotals *	11	1287	1559	238	166	72	18.49 %		0	389712	$ 1,630,184	$ 5.43	$ 6,850
* Social Sciences *													
INFORMATION	4	527	503	41	41	0	7.78 %		0	493044	$ 1,865,618	$ 4.91	$ 45,503
APPLIED SERVICE & BUSINESS	17	4611	4182	230	217	13	4.99 %		0	911308	$ 2,896,083	$ 4.13	$ 12,592
RELATED INSTRUCTION	1	0	0	0	0	0	N/A		0	112304	$ 340,708	$ 3.94	N/A
* Social Science Subtotals *	22	5138	4685	271	258	13	5.27 %		0	1516656	$ 5,102,409	$ 4.37	$ 18,828
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	1	4	7	0	0	0	0.00 %		0	0	$ 0	N/A	N/A
LASER/ELECTRONICS	1	464	466	61	41	20	13.15 %		0	118560	$ 393,465	$ 4.31	$ 6,450
MANUFACTURING, DESIGN & ENGR.	4	272	331	44	31	13	16.18 %		0	131184	$ 547,640	$ 5.42	$ 12,446
AUTOMOTIVE/HEAVY MECHANICS	1	40	54	6	3	3	15.00 %		0	21696	$ 77,014	$ 4.61	$ 12,836
BUILDING SYSTEMS & CONST.	3	155	202	20	16	4	12.90 %		0	49646	$ 167,379	$ 4.38	$ 8,369
* Physical Science Subtotals *	10	935	1060	131	91	40	14.01 %		0	321086	$ 1,185,498	$ 4.79	$ 9,050
*** Grand Totals ***	43	7360	7304	640	515	125	8.70 %		0	2227456	$ 7,918,091	$ 4.62	$ 12,372

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL COMMUNITY COLLEGES IN THE DALLAS/FT. WORTH METRO REGION PCLSREGD

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the Dallas/Ft. Worth Metro Region *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	117	4820	5988	614	519	95	12.74 %		0	1262160	$ 5,902,005	$ 6.07	$ 9,612
AGRIBUSINESS	21	315	304	36	27	9	11.43 %		0	119120	$ 498,970	$ 5.44	$ 13,860
* Biological Science Subtotals *	138	5135	7292	650	546	104	12.66 %		0	1381280	$ 6,400,975	$ 6.02	$ 9,848
* Social Sciences *													
INFORMATION	45	3477	3792	178	161	17	5.12 %		0	2036646	$ 7,818,291	$ 4.99	$ 43,923
APPLIED SERVICE & BUSINESS	222	10029	10589	913	778	135	9.10 %		0	3372172	$ 10,305,448	$ 3.97	$ 11,287
RELATED INSTRUCTION	11	0	0	0	0	0	N/A		0	336192	$ 1,019,938	$ 3.94	N/A
* Social Science Subtotals *	278	13506	14381	1091	939	152	8.08 %		0	5745010	$ 19,143,677	$ 4.33	$ 17,547
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	1	0	0	3	3	0	N/A		0	0	$ 0	N/A	$ 0
LASER/ELECTRONICS	22	1130	1132	156	124	32	13.81 %		0	383298	$ 1,204,555	$ 4.31	$ 7,722
MANUFACTURING, DESIGN & ENGR.	64	1224	1391	101	95	6	8.25 %		0	490494	$ 2,114,271	$ 5.80	$ 20,933
AEROSPACE	20	634	769	62	61	1	9.76 %		0	276914	$ 1,493,062	$ 7.00	$ 24,082
AUTOMOTIVE/HEAVY MECHANICS	25	443	483	101	58	43	22.60 %		0	373868	$ 1,336,644	$ 4.84	$ 13,236
BUILDING SYSTEMS & CONST.	34	591	612	80	41	39	13.54 %		0	310980	$ 1,132,312	$ 4.73	$ 14,154
* Physical Science Subtotals *	166	4022	4387	503	382	121	12.51 %		0	1815552	$ 7,281,044	$ 5.21	$ 14,475
*** Grand Totals ***	582	22663	26040	2244	1867	377	9.90 %		0	6941842	$ 32,825,696	$ 4.77	$ 14,628

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR COMMUNITY COLLEGES IN THE EL PASO METRO REGION

PCLSREGE

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the El Paso Region *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	18	2300	2471	247	158	89	10.74 %		0	478284	$ 2,092,170	$ 5.66	$ 8,470
AGRIBUSINESS	1	2	1	0	0	0	0.00 %		0	0	$ 0	N/A	N/A
* Biological Science Subtotals *	19	2302	2472	247	158	89	10.73 %		0	478284	$ 2,092,170	$ 5.66	$ 8,470
* Social Sciences *													
INFORMATION	5	1346	1039	91	55	36	6.76 %		0	385552	$ 1,448,757	$ 4.88	$ 15,920
APPLIED SERVICE & BUSINESS	33	3482	3070	375	328	47	10.77 %		0	866000	$ 2,769,008	$ 4.15	$ 7,384
RELATED INSTRUCTION	1	0	0	0	0	0	N/A		0	10656	$ 32,328	$ 3.94	N/A
* Social Science Subtotals *	39	4828	4109	466	383	83	9.65 %		0	1262208	$ 4,250,093	$ 4.37	$ 9,120
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	1	0	5	0	0	0	N/A		0	0	$ 0	N/A	N/A
LASER/ELECTRONICS	2	353	306	31	31	0	8.78 %		0	54160	$ 179,741	$ 4.31	$ 5,798
MANUFACTURING, DESIGN & ENGR.	5	244	195	28	25	3	11.48 %		0	95424	$ 400,684	$ 5.45	$ 14,310
AEROSPACE	2	9	2	1	1	0	11.11 %		0	0	$ 0	N/A	$ 0
AUTOMOTIVE/HEAVY MECHANICS	1	212	167	19	12	7	8.96 %		0	60192	$ 213,864	$ 4.61	$ 11,245
BUILDING SYSTEMS & CONST.	3	100	61	4	3	1	4.00 %		0	18432	$ 60,034	$ 4.23	$ 15,009
* Physical Science Subtotals *	14	918	736	83	72	11	9.04 %		0	228208	$ 854,123	$ 4.88	$ 10,291
*** Grand Totals ***	72	8048	7317	796	613	183	9.89 %		0	1968700	$ 7,196,386	$ 4.75	$ 9,041

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL COMMUNITY COLLEGES IN THE HOUSTON METRO REGION PCLSREGH

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT 877%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the Houston Metro Region *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	56	2944	3722	1325	790	535	45.01 %		0	2807754	$ 12,638,287	$ 5.65	$ 9,536
BIOTECHNOLOGIES	1	2	28	0	0	0	0.00 %		0	4512	$ 21,054	$ 6.06	N/A
AGRIBUSINESS	8	124	135	65	20	45	52.42 %	*	32112	90616	$ 330,410	$ 5.44	$ 5,852
* Biological Science Subtotals *	65	3070	3885	1390	810	580	45.28 %	*	32112	2903082	$ 13,039,731	$ 5.63	$ 9,381
* Social Sciences *													
INFORMATION	21	1963	1744	351	133	218	17.88 %	*	111456	1813172	$ 6,969,658	$ 4.99	$ 19,857
APPLIED SERVICE & BUSINESS	145	6883	7155	1032	618	414	14.99 %	*	30752	4221814	$ 12,794,391	$ 3.94	$ 12,398
RELATED INSTRUCTION	7	0	0	0	0	0	N/A	*	11864	113552	$ 344,493	$ 3.94	N/A
* Social Science Subtotals *	173	8846	8899	1383	751	632	15.63 %	*	153872	6148538	$ 20,108,542	$ 4.25	$ 14,540
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	16	236	197	16	13	3	6.78 %		0	78944	$ 345,643	$ 5.69	$ 21,603
LASER/ELECTRONICS	22	1825	1974	339	166	173	18.58 %	*	29120	680686	$ 2,458,728	$ 4.69	$ 7,253
MANUFACTURING, DESIGN & ENGR.	33	1582	1763	300	91	209	18.96 %	*	83520	1104358	$ 4,817,333	$ 5.43	$ 15,391
AEROSPACE	6	393	355	114	23	91	29.01 %		0	295509	$ 1,751,268	$ 7.70	$ 15,362
AUTOMOTIVE/HEAVY MECHANICS	15	281	336	236	31	207	84.70 %	*	80208	320724	$ 1,152,574	$ 4.67	$ 4,843
BUILDING SYSTEMS & CONST.	16	886	712	66	25	63	12.83 %		0	256096	$ 856,143	$ 4.31	$ 9,729
* Physical Science Subtotals *	108	5003	5337	1095	349	746	21.89 %	*	192848	2738319	$ 11,181,689	$ 5.30	$ 10,212
*** Grand Totals ***	346	16919	18121	3866	1910	1958	22.86 %		376632	11789939	$ 44,329,962	$ 4.88	$ 11,461

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR THE HOUSTON METRO REGION EXCLUDING HCC PCLSRGHX

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the Houston Metro Region excluding HCC *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	42	2944	3722	812	493	319	27.56 %		0	1590262	$ 7,149,164	$ 5.64	$ 8,804
BIOTECHNOLOGIES	1	2	28	0	0	0	0.00 %		0	4512	$ 21,054	$ 6.06	N/A
AGRIBUSINESS	7	124	135	59	16	43	47.58 %	*	32112	71056	$ 297,639	$ 5.44	$ 5,045
* Biological Science Subtotals *	50	3070	3885	871	509	362	28.37 %	*	32112	1665850	$ 7,467,857	$ 5.62	$ 8,574
* Social Sciences *													
INFORMATION	17	1963	1744	262	96	166	14.37 %	*	111456	1127996	$ 4,356,105	$ 5.02	$ 15,447
APPLIED SERVICE & BUSINESS	121	6880	7151	710	393	317	10.32 %	*	30752	2646166	$ 7,835,222	$ 3.64	$ 11,036
RELATED INSTRUCTION	6	0	0	0	0	0	N/A	*	11664	111056	$ 336,921	$ 3.94	N/A
* Social Science Subtotals *	144	8843	8895	992	489	503	11.22 %	*	153872	3887218	$ 12,528,248	$ 4.19	$ 12,629
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	13	236	197	12	9	3	5.08 %		0	64816	$ 268,173	$ 5.77	$ 24,014
LASER/ELECTRONICS	21	1825	1974	313	140	173	17.15 %	*	29120	604736	$ 2,206,666	$ 4.74	$ 7,050
MANUFACTURING, DESIGN & ENGR.	29	1510	1695	171	75	96	11.32 %	*	63520	829046	$ 3,458,911	$ 5.42	$ 20,233
AEROSPACE	5	393	355	34	23	11	6.65 %		0	101554	$ 832,794	$10.65	$ 24,494
AUTOMOTIVE/HEAVY MECHANICS	15	281	336	238	31	207	84.70 %	*	60208	320724	$ 1,152,574	$ 4.67	$ 4,843
BUILDING SYSTEMS & CONST.	14	688	712	86	23	63	12.54 %		0	253920	$ 842,541	$ 4.31	$ 9,797
* Physical Science Subtotals *	97	4931	5269	854	301	553	17.32 %	*	192848	2174796	$ 8,762,659	$ 5.24	$ 10,264
*** Grand Totals ***	291	16844	18049	2717	1299	1416	16.13 %		378832	7727664	$ 28,778,764	$ 4.64	$ 10,592

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR TECHNICAL INSTITUTES IN THE LAMAR METRO REGION PCLSREGL

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT @77%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the Lamar Region *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	18	539	1005	175	105	70	32.47 %		0	525744	$ 1,936,693	$ 4.79	$ 11,078
* Biological Science Subtotals *	18	539	1005	175	105	70	32.47 %		0	525744	$ 1,936,693	$ 4.79	$ 11,078
* Social Sciences *													
INFORMATION	7	283	211	60	33	27	21.20 %		0	102704	$ 392,247	$ 4.98	$ 6,537
APPLIED SERVICE & BUSINESS	31	631	571	178	116	62	28.21 %		0	277344	$ 796,821	$ 3.73	$ 4,477
RELATED INSTRUCTION	3	0	0	0	0	0	N/A		0	96160	$ 297,798	$ 3.94	N/A
* Social Science Subtotals *	41	914	782	238	149	89	26.04 %		0	476208	$ 1,486,866	$ 4.04	$ 8,247
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	4	78	134	9	8	1	11.54 %		0	10512	$ 34,238	$ 4.23	$ 3,804
LASER/ELECTRONICS	10	366	260	87	82	5	23.77 %		0	205086	$ 769,712	$ 4.87	$ 8,847
MANUFACTURING, DESIGN & ENGR.	14	611	569	80	74	6	13.09 %		0	191680	$ 817,257	$ 5.54	$ 10,216
AEROSPACE	1	3	1	3	3	0	100.0 %		0	1152	$ 3,823	$ 4.31	$ 1,274
AUTOMOTIVE/HEAVY MECHANICS	5	76	61	16	13	3	21.05 %		0	39760	$ 151,257	$ 4.94	$ 9,454
BUILDING SYSTEMS & CONST.	2	97	65	11	11	0	11.34 %		0	38808	$ 125,750	$ 4.23	$ 11,432
* Physical Science Subtotals *	36	1231	1090	206	191	15	16.73 %		0	486800	$ 1,902,036	$ 5.07	$ 9,233
*** Grand Totals ***	95	2684	2677	619	445	174	23.06 %		0	1490752	$ 5,327,597	$ 4.64	$ 8,607

STATE OF TEXAS - VOCATIONAL/TECHNICAL PROGRAM RESULTS COMPOSITE
FOR ALL COMMUNITY COLLEGES IN THE SAN ANTONIO METRO REGION

PCLSREGS

CLUSTER NAME	NO.OF PGMS	FALL 1990 ENROLL	FALL 1991 ENROLL	-1990-91 GRADUATES-- TOTAL	DEGREES	CERTIF	GRADUATE PERCENT YIELD	P F	1990-91 CONT HRS PRISON	1990-91 TOTAL CONT HRS	FUNDING AMOUNT 877%	FORMULA FUNDING RATE	STATE FUNDING PER GRAD
* Composite for the San Antonio Region *													
* Biological Sciences *													
MEDICAL/HEALTHCARE	15	2783	3035	498	266	232	17.89 %		0	909806 $	3,741,766 $	5.34	$ 7,514
AGRIBUSINESS	1	16	20	1	1	0	6.25 %		0	1024 $	4,289 $	5.44	$ 4,289
* Biological Science Subtotals *	16	2799	3055	499	267	232	17.83 %		0	910832 $	3,746,055 $	5.34	$ 7,507
* Social Sciences *													
INFORMATION	8	1349	1318	125	111	14	9.27 %		0	491488 $	1,870,442 $	4.94	$ 14,964
APPLIED SERVICE & BUSINESS	33	4103	3848	409	371	38	9.97 %		0	1133085 $	3,470,148 $	3.98	$ 8,484
RELATED INSTRUCTION	2	0	0	0	0	0	N/A		0	73200 $	222,074 $	3.94	N/A
* Social Science Subtotals *	43	5452	5166	534	482	52	9.79 %		0	1697773 $	5,562,664 $	4.26	$ 10,417
* Physical Sciences *													
ENERGY & ENVIRONMENTAL	1	14	8	2	2	0	14.29 %		0	960 $	3,127 $	4.23	$ 1,564
LASER/ELECTRONICS	5	569	499	68	68	0	11.95 %		0	160064 $	552,091 $	4.48	$ 8,118
MANUFACTURING, DESIGN & ENGR.	11	503	449	33	33	0	6.53 %		0	197504 $	809,709 $	5.32	$ 24,538
AEROSPACE	4	56	32	3	3	0	5.36 %		0	41440 $	263,309 $	8.25	$ 87,770
AUTOMOTIVE/HEAVY MECHANICS	3	245	225	33	33	0	13.47 %		0	112368 $	403,430 $	4.66	$ 12,225
BUILDING SYSTEMS & CONST.	4	241	203	27	26	1	11.20 %		0	78816 $	261,071 $	4.30	$ 9,889
* Physical Science Subtotals *	28	1630	1416	166	165	1	10.18 %		0	591152 $	2,292,737 $	5.04	$ 13,812
*** Grand Totals ***	87	9881	9637	1199	914	285	12.13 %		0	3199757 $	11,601,458 $	4.71	$ 9,676